

=> FILE REG

FILE 'REGISTRY' ENTERED AT 12:50:42 ON 24 JUL 2008

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=> DISPLAY HISTORY FULL L1-

FILE 'REGISTRY' ENTERED AT 12:27:30 ON 24 JUL 2008

L1 E ZIRCONIUM OXYCHLORIDE/CN
4 SEA ("ZIRCONIUM OXYCHLORIDE"/CN OR "ZIRCONIUM OXYCHLORIDE
(ZROCL2)"/CN OR "ZIRCONIUM OXYCHLORIDE (ZROCL2)
PENTAHYDRATE"/CN OR "ZIRCONIUM OXYCHLORIDE (ZROCL2)
TETRAHYDRATE"/CN OR "ZIRCONIUM OXYCHLORIDE OCTAHYDRATE"/C
N OR "ZIRCONIUM OXYCHLORIDE OCTAHYDRATE (ZROCL2.8H2O)"/CN
)
E CERIUM NITRATE/CN
L2 7 SEA ("CERIUM NITRATE"/CN OR "CERIUM NITRATE (CE(NO3)3)"/C
N OR "CERIUM NITRATE (CE(NO3)4)"/CN OR "CERIUM NITRATE
(CE(OH)(NO3)3)"/CN OR "CERIUM NITRATE HEXAHYDRATE"/CN OR
"CERIUM NITRATE HYDRATE (CE(NO3)3.XH2O)"/CN)
E HEXAMETHYLENETETRAMINE/CN
L3 1 SEA HEXAMETHYLENETETRAMINE/CN

FILE 'HCA' ENTERED AT 12:39:18 ON 24 JUL 2008

L4 5994 SEA L1 OR (ZIRCONIUM# OR ZR) (2A) (OXYCHLORIDE# OR
OXY#(A)CHLORIDE#) OR ZROCL2 OR ZRCL2O
L5 5845 SEA L2 OR (CERIUM# OR CE) (A)NITRATE# OR CE(W)NO3
L6 17517 SEA L3 OR HEXAMETHYLENETETRAMINE# OR HEXAMETHYLENETETRAAM
INE# OR HEXAMETHYLENE#(2A) (TETRAMINE# OR TETRAAMINE#)

FILE 'REGISTRY' ENTERED AT 12:39:25 ON 24 JUL 2008

L7 E CERIUM OXIDE/CN
2 SEA "CERIUM OXIDE"/CN
L8 91 SEA (CE (L) O)/ELS (L) 2/ELC.SUB
E ZIRCONIUM/CN
L9 1 SEA ZIRCONIUM/CN

FILE 'HCA' ENTERED AT 12:45:26 ON 24 JUL 2008

L10 40443 SEA L7 OR L8 OR (CERIUM# OR CE) (W) (OXIDE# OR DIOXIDE# OR
TRIOXIDE# OR TETRAOXIDE# OR TETROXIDE#) OR CEO OR CEO2
OR CE2O3 OR CEO3 OR CEO4 OR CE2O4
L11 76585 SEA L9
L12 2 SEA L4 AND L5 AND L6
L13 2 SEA L12 AND (L10 OR L11)

=> FILE HCA

FILE 'HCA' ENTERED AT 12:50:54 ON 24 JUL 2008

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=> D L12 1-2 BIB ABS HITSTR IT RE

L12 ANSWER 1 OF 2 HCA COPYRIGHT 2008 ACS on STN

AN 123:23701 HCA Full-text

OREF 123:4227a,4230a

TI Thin plate-like electrically conductive zinc oxide and its manufacture

IN Fujii, Hideyo; Yokoyama, Masakazu

PA Sumitomo Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 07069631	A	19950314	JP 1993-278224	19931108

PRAI	JP 1993-278224	A	19931108
	JP 1993-159678		19930629

AB The oxide contg. 0.0001-0.3 mol Al (to Zn) and having av. thickness 0.1-2 μ m, av. particle size 1-100 μ m, and aspect ratio 3-100 is coated with 0.00005-0.05 mol (to Zn) oxides of Sb, In, Ce, Ga, Sn, Zr, and Ti. The manuf. involves mixing solns. contg. Zn and Al salts and solns. contg. hexamethylenetetramine and/or urea in hot water and hydrolizing at pH 5.5-7.5 to prep. thin plate-like basic Zn-based coppts., optionally sepg. solids from liqs. and firing the coppts. to prep. the Zn oxide, mixing with 0.00005-0.05 mol (to Zn) aq. compds. of Sb, In, Ce, Sn, Zr, and Ti to deposit on the oxide, and firing in reducing atm.

IT 7699-43-6, Zirconium oxychloride
10108-73-3, Cerous nitrate

(manuf. of thin plate-like elec. conductors contg. ZnO coated with metal oxides)

RN 7699-43-6 HCA

CN Zirconium, dichlorooxo- (CA INDEX NAME)



RN 10108-73-3 HCA

CN Nitric acid, cerium(3+) salt (3:1) (CA INDEX NAME)



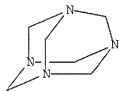
● 1/3 Ce(III)

IT 100-97-0, Hexamethylenetetramine, reactions

(manuf. of thin plate-like elec. conductors contg. ZnO coated with metal oxides)

RN 100-97-0 HCA

CN 1,3,5,7-Tetraazatricyclo[3.3.1.1^{3,7}]decane (CA INDEX NAME)



IT Electric conductors

(manuf. of thin plate-like elec. conductors contg. ZnO coated with metal oxides)

IT 1312-43-2, Indium oxide 1314-23-4, Zirconium oxide, uses
1327-33-9, Antimony oxide 1332-29-2, Tin oxide 11129-18-3,
Cerium oxide 12024-21-4, Gallium oxide 13463-67-7, Titanium
oxide, uses

(manuf. of thin plate-like elec. conductors contg. ZnO coated with metal oxides)

IT 1314-13-2, Zinc oxide, properties
(manuf. of thin plate-like elec. conductors contg. ZnO coated with metal oxides)

IT 7646-78-8, Tin tetrachloride, processes 7699-43-6, Zirconium oxychloride 7733-02-0, Zinc sulfate 7772-99-8, Tin dichloride, processes 10025-91-9, Antimony trichloride 10031-62-6, Tin sulfate 10043-01-3, Aluminum sulfate 10108-73-3, Cerous nitrate 13464-82-9, Indium sulfate 13494-90-1, Gallium nitrate 13693-11-3, Titanium sulfate (manuf. of thin plate-like elec. conductors contg. ZnO coated with metal oxides)

IT 57-13-6, Urea, reactions 100-97-0, Hexamethylenetetramine, reactions (manuf. of thin plate-like elec. conductors contg. ZnO coated with metal oxides)

L12 ANSWER 2 OF 2 HCA COPYRIGHT 2008 ACS on STN

AN 108:97197 HCA Full-text

OREF 108:15955a,15958a

TI Manufacture of zinc oxide-containing composite oxide powders

IN Saida, Kenji; Fujii, Hideyo

PA Sumitomo Chemical Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 15 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 62275025	A	19871130	JP 1986-152576	198606 27

PRAI JP 1986-28599 A1 19860212

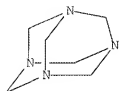
AB Composite oxides of Zn and ≥ 1 metal of Al, Fe, Cr, Ce, Zr, or Ti are prepd. by hydrolyzing a zinc salt and the salt(s) of assocd. metal(s) in alc. aq. soln. in the presence of hydrolysis precipitant (e.g., urea or hexamethylenetetramine) and subsequently sintering the resulting ppt. The formed composite oxide is used as an UV-ray shielding agent. Thus, 0.45 g Al(NO₃)₃·9H₂O and 362 g Zn(NO₃)₂·6H₂O were dissolved in 1200 mL EtOH, then the resulting soln. was mixed with a soln. of 83 g hexamethylenetetramine in 1600 mL water. The mixed soln. was heated at 80° under stirring to form a ppt. which was removed by filtration, dried, and sintered to ZnO-Al₂O₃ powders of diam. 0.01 μ .

IT 100-97-0, uses and miscellaneous
(hydrolysis precipitants, in manuf. of zinc oxide-contg. composite

oxide powders for UV-ray shielding agents)

RN 100-97-0 HCA

CN 1,3,5,7-Tetraazatricyclo[3.3.1.1^{3,7}]decane (CA INDEX NAME)



IT 7699-43-6, Zirconium oxychloride

10108-73-3, Cerium nitrate

(in zinc oxide-contg. composite oxide powder manuf.)

RN 7699-43-6 HCA

CN Zirconium, dichlorooxo- (CA INDEX NAME)



RN 10108-73-3 HCA

CN Nitric acid, cerium(3+) salt (3:1) (CA INDEX NAME)



● 1/3 Ce(III)

IT Oxides, preparation

(prepn. of composite, contg. zinc oxide, by copptn. of aq. soln., hydrolysis precipitants for)

IT Ultraviolet radiation

(shielding agents for, manuf. of zinc oxide-contg. oxide powder for)

IT 1306-38-3P, Ceria, uses and miscellaneous 1314-23-4P, Zirconia, preparation 1332-37-2P, Iron oxide (unspecified), preparation 1344-28-1P, Alumina, preparation 11118-57-3P, Chromium oxide (unspecified) 13463-67-7P, Titania, preparation

(composite oxide powders contg. zinc oxide and, prepn. of, hydrolysis precipitants for)

IT 1314-13-2P, Zinc oxide, preparation
(composite oxide powders contg., manuf. of, hydrolysis precipitants for)

IT 57-13-6, Urea, uses and miscellaneous
(hydrolysis precipitant, in manuf. of zinc oxide-contg. composite oxide powders for UV-ray shielding agents)

IT 100-97-0, uses and miscellaneous
(hydrolysis precipitants, in manuf. of zinc oxide-contg. composite oxide powders for UV-ray shielding agents)

IT 546-68-9, Titanium isopropoxide 557-34-6, Zinc acetate
7550-45-0, Titanium chloride, uses and miscellaneous
7699-43-6, Zirconium oxychloride
7779-88-6, Zinc nitrate 10108-73-3, Cerium
nitrate 13473-90-0, Aluminum nitrate 13548-38-4,
Chromium nitrate 14013-86-6, Ferrous nitrate 24670-27-7
(in zinc oxide-contg. composite oxide powder manuf.)